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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,643	09/26/2003	Radia J. Perlman	SUN-P9311-SPL	7885

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EXAMINER	
MOUTAOUAKIL, MOUNIR	
ART UNIT	PAPER NUMBER
2616	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/671,643	PERLMAN, RADIA J.	
	Examiner	Art Unit	
	Mounir Moutaouakil	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *01/10/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Seaman (US 6,611,502). Hereinafter referred to as Seaman.

Regarding claims 1, 8, and 15 Seaman discloses a method that prevents loops from occurring when spanning tree configuration messages are lost while executing a spanning tree protocol across bridges in a network. The method comprises executing the spanning tree protocol on a bridge, wherein the spanning tree protocol configures each port coupled to the bridge into either a forwarding state, in which messages are forwarded to and from the port, or a backup state, in which messages are not forwarded to or from the port (see column 4, lines 11-43, the spanning tree protocol is operating in accordance to IEEE 802.1D, which ensures a loop-free topology, and configure the multiple ports coupled to the bridge into either forward state or blocking state); monitoring ports coupled to the bridge to determine when messages are lost by the

ports (see column 3, lines 47-53, the system is enabled to monitor each port for an early port failure detection); if one or more messages are lost on a port, refraining from forwarding messages to or from the port until no messages are lost by the port for an amount of time (see column 7, lines 6-18. whenever a port failure is detected, the system waits a period of time to decide port status).

Regarding claims 2, 9, and 16. Seaman discloses a loop-free spanning tree method where the amount of time is greater then a time interval provided by bridges between consecutive spanning tree configuration messages (see figure 3, elements 202-206).

Regarding claims 3, 10, and 17. Seaman discloses a system where the monitoring ports coupled to the bridge involves communicating with hardware associated with the ports to determine if the ports have lost messages (see column 3, lines 46-53. see figure 1. bridges communicate with LANs through the ports embedded within. Ports communicate with the hardware associated with the LANs. The system monitors the ports to permit early link failure detection).

Regarding Claims 4, 11, and 18. The spanning tree protocol or algorithm of Seaman involves placing ports coupled to the bridge into either the forwarding state or the backup state in a manner that ensures that messages are forwarded without cycling across a spanning tree that couples together in the network (see column 4, lines 11-43. the spanning tree algorithm involves placing ports into either forwarding state or blocking state in a manner to ensure loop-free (tree) bridge network topology).

Regarding claim 5, 12, and 19. Seaman discloses that the spanning tree topology is as specified by the IEEE standard 802.1D. The spanning tree protocol of Seaman involves electing a single bridge among all bridges on all links on the network to be a root bridge (see the admitted prior art figure 2, also selecting a root bridge is part of the spanning tree protocol standard as disclosed by IEEE 802.1D); calculating the distance of the shortest path from each node to the root bridge (see the admitted prior art figure 2, also selecting a root bridge is part of the spanning tree protocol standard as disclosed by IEEE 802.1D); electing a designated bridge for each link from all bridges on the link, wherein the designated bridge is closest to the root bridge and will forward packets from the link to the root bridge (see the admitted prior art figure 2, also selecting a root bridge is part of the spanning tree protocol standard as disclosed by IEEE 802.1D); choosing a root port for each bridge that provides the best path to the root bridge (see the admitted prior art figure 2, also selecting a root bridge is part of the spanning tree protocol standard as disclosed by IEEE 802.1D); selecting ports on each bridge to be included in the spanning tree, wherein the selected ports include the root port and any ports coupled to links upon which the bridge serves as the designated bridge (see the admitted prior art figure 2, also selecting a root bridge is part of the spanning tree protocol standard as disclosed by IEEE 802.1D); placing selected ports into the forwarding state; and placing all other ports into the backup state (see the admitted prior art figure 2, also selecting a root bridge is part of the spanning tree protocol standard as disclosed by IEEE 802.1D).

Regarding claims 6, 13, and 20. Seaman discloses a spanning tree protocol operating in accordance with Institute of Electrical and Electronics Engineers (IEEE) standard 802.1D (see abstract, see column 3, lines 54-65).

Regarding claims 7, 14, and 21. Seaman discloses Local Area Networks (LANs) links (see figure 1, boxes 105-108).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mounir Moutaouakil whose telephone number is 571-270-1416. The examiner can normally be reached on Monday-Thursday (4pm-4: 30pm) eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mounir Moutaouakil
Art Unit: 2616

HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600